AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-12 (canceled)

13. (withdrawn) A process for making an organic FET comprising:

providing a substrate suitable for an organic FET;

applying a liquid-phase solution including at least one silsesquioxane precursor over the surface of the substrate; and

curing the solution to forma high-dielectric constant film of silsesquioxanes.

14. (withdrawn) The process of claim 13 in which the step of curing comprises heating the substrate and solution to a temperature of less than 150°C.

15. (withdrawn) The process of claim 13, further comprising a step of cleaning the substrate before the solution of silsesquioxane precursors is applied.

16. (withdrawn) The process of claim 13, in which the step of cleaning is achieved by rinsing with acetone, methanol, or de-ionized water.

17. (withdrawn) The process of claim 13, in which the step of cleaning is achieved by reactive ion etching a surface of the substrate with oxygen plasma.

18. (withdrawn) The process of claim13, in which the step of applying the liquid-phase solution comprises spin-casting.

Claim 19 (canceled)

Claim 20-29 (canceled)

30. (new) An organic field effect transistor (OFET), comprising:

a gate dielectric layer on a substrate, said gate dielectric layer comprising at least one silsesquioxane precursor oligomer having phenyl pendant groups, and wherein said substrate is coated with indium tin oxide.

31. (new) The OFET recited in Claim 30, wherein said substrate comprises polyethylene terphthalate.

32. (new) The OFET recited in Claim 30, further comprising:

a gate electrode on said substrate, wherein said gate dielectric is on said gate electrode;

an organic semiconducting layer on said gate dielectric layer; and

a source electrode and a drain electrode in contact with said organic semiconducting layer.

33. (new) The OFET recited in Claim 32, wherein said substrate comprises polyethylene terphthalate.

34. (new) The OFET recited in Claim 30, further including another silsesquioxane precursor oligomer having methyl pendant groups.

35. (new) The OFET recited in Claim 30, further including another silsesquioxane precursor oligomer having dimethyl pendant groups.

36. (new) The OFET recited in Claim 30, wherein said silsesquioxane precursor oligomer is an alkyl(methyl)phenyl oligomer.

37. (new) An organic field effect transistor (OFET), comprising:

a gate dielectric layer on a substrate, said gate dielectric layer comprising at least one silsesquioxane precursor oligomer having phenyl pendant groups and wherein said gate dielectric layer is a silane-reagent treated layer.

38. (new) The OFET recited in Claim 37, wherein said silane reagent is selected from the group $X\text{-}Si(OR^1)_m(R^2)_n$, where the values for m and n are from 0 to 3 and m+n=3; R^1 is an alkyl group having from 1 to 6 carbon atoms; R^2 is an alkyl group having from 1 to 16 carbon atoms or a halogen group; and X is a substituent selected from a substituted or unsubstituted aryl, $F_3C(F_2C)_9CH_2$-, the group $NH(Si)(CH_3)_3$; and a saturated or unsaturated alkyl or alkoxycarbonyl having from 6 to 20 carbon atoms.

39. (new) The OFET recited in Claim 38, wherein said silane reagent is selected from $F_3C(F_2C)_9CH_2$-$Si(OCH_3)_3$; $C_8H_{17}Si(OCH_3)(CH_3)_2$; $C_6H_5Si(OCH_3)_3$; $C_{18}H_{37}Si(OCH_3)_3$; CH_2CH-$C(O)$-O-$(CH_2)_3Si(OCH_3)(CH_3)_2$; $F_3C(F_2C)_9$-$Si(Cl)_3$;Cl-$CH_4SiCl_2CH_3$; and $(CH_3)_3SiNHSi(CH_3)_3$.

40. (new) The OFET of Claim 37, wherein said substrate is coated with indium tin oxide.

41. (new) The OFET recited in Claim 40, wherein said substrate comprises polyethylene terphthalate.

42. (new) The OFET recited in Claim 37, further comprising:

a gate electrode on said substrate, wherein said gate dielectric is on said gate electrode;

an organic semiconducting layer on said gate dielectric layer; and

a source electrode and a drain electrode in contact with said organic semiconducting layer.